Message

From: Strynar, Mark [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5A9910D5B38E471497BD875FD329A20A-STRYNAR, MARK]
Sent: 9/22/2020 3:21:33 PM
To: Mei.Sun@uncc.edu; McCord, James [mccord.james@epa.gov]
CC: Yen-Ling Liu [yliu81@uncc.edu]
Subject: RE: structure confirmation of nafion byproduct 4
Attachments: Copy of Table 3+ detailed sources.xlsx

Hi Mei,

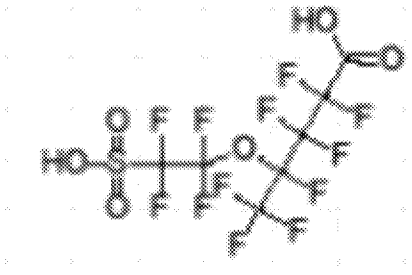
Per the attached Excel file from Chemours to NCDEQ they draw the structure as the top one (row 9). However I am unsure if James saw both isomers in the work we presented in the ES&T paper you referenced in Figure 86 and in Table S2 both may be real. I will let him tell you for sure.

Mark

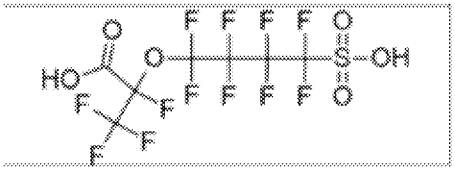
From: Mei Sun <Mei.Sun@uncc.edu>
Sent: Tuesday, September 22, 2020 10:04 AM
To: Strynar, Mark <Strynar.Mark@epa.gov>
Cc: Yen-Ling Liu <yliu81@uncc.edu>
Subject: structure confirmation of nafion byproduct 4

Hi Mark

I am working on PFAS paper and would like to confirm with you the chemical structure of NBP4. Based on the formula of C7H2F12O6S people use for Nafion byproduct 4, I found two isotherms in your paper (https://pubs.acs.org/doi/10.1021/acs.est.8b06017):
This one is from Figure 86 in the SI:



And this one is from line 22 of Table S2



When searching in the EPA dashboard with the CAS 852157-01-8 in Table S2, I found the second structure too. So could you please confirm which, if any, should be the right structure for NBP4? Thank you.

Mei Sun

Assistant Professor
Department of Civil and Environmental Engineering
University of North Carolina at Charlotte
Energy Production and Infrastructure Center 3163
9201 University City Blvd | Charlotte, NC 28223
Phone: 704-687-1723 | Fax: 704-687-0957
Website: https://coefs.uncc.edu/msun8/